CONTAMINATION OF FARM PRODUCE

After deposition, the contamination level of farm produce fell at variable rates

The contamination level of farm produce was highest immediately after deposition. For leafy vegetables, contamination fell quickly in the two months which followed. In cows’ milk, it depended on the animals’ feeding routines. The contamination of meat fell much more slowly.

IODINE 131 CONTAMINATION OF FARM PRODUCE FELL QUICKLY AS THIS IS A SHORT-LIVED RADIONUCLIDE. IODINE 131 WAS NO LONGER PRESENT IN MOST PRODUCTS BY THE END OF JULY 1986

Regulations:
From 6 May 1986, European recommendations set the limits for iodine 131 activity in imported dairy products and dairy products for consumption by infants at 500, 250 and 100 Bq/l successively. These limits were also reduced for other foodstuffs: 350, 170 and 100 Bq/kg.

Lettuce and other leafy vegetables produced in the east often exceeded these values. The same occurred on a more occasional basis with French dairy production, and particularly with goats’ milk in Corsica.

CAESIUM 137 CONTAMINATION OF LEAFY VEGETABLES FELL THROUGHOUT MAY AND JUNE. CONTAMINATION OF MILK AND MEAT CHANGED ACCORDING TO FODDER CONTAMINATION

In May and June 1986, plant and vegetable contamination was in the form of direct deposition on the leaves. As they grew over this period, the contamination decreased on a daily basis.

From July 1986, plants and vegetables planted after the deposition were contaminated through their roots. This contamination level was 100 to 1,000 times lower.
In the spring of 1986 during the grazing period, contamination activity in both cows’ milk and grass fell. It rose again in autumn 1986 when the animals stopped grazing and were fed with fodder harvested in the spring.

In the east of France, contamination activity in milk fell from 100 to a few Bq/l in one year.

Regulations:
The restrictions placed on the import of foodstuffs with respect to their caesium 137 content came into force on 31 May 1986: 370 Bq/l for dairy products and 600 Bq/kg for other products.

French production in the east of the country only rarely exceeded these limits, except in the case of leafy vegetables in the first days of May, and meat for which caesium 137 contamination activity of up to 1,000 Bq/kg was recorded occasionally.